



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/202,783	05/24/1999	HANS-JURGEN FISCHER	10191/913	3361

26646 7590 04/28/2005

KENYON & KENYON
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

HAVAN, THU THAO

ART UNIT	PAPER NUMBER
----------	--------------

3624

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/202,783

Applicant(s)

FISCHER ET AL.

Examiner

Thu Thao Haven

Art Unit

3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

4/L

Detailed Action

Drawings

The drawings filed on December 21, 1998 are accepted by the Examiner.

Response to Amendment

Claims 8-17 are pending. This action is in response to the amendment received August 21, 2004.

Response to Arguments

Applicant's arguments with respect to claims 8-17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaum et al. (US patent no. 5,485,520) in view of non-patent literature (William Stallings. Cryptography and Network Security. Prentice Hall. 1998. Pages 151-153).

Re claim 8, Chaum teaches a method for posting debit information to a mobile intelligent storage device using a terminal, the terminal being in a wireless, secure

Art Unit: 3624

communication with a computer (col. 1, lines 5-15 and lines 31-40; fig. 1), the method comprising the steps of:

performing a mutual dynamic authenticity test between the computer, the terminal and the intelligent storage device using at least one data word (col. 3, lines 10-45; col. 4, lines 24-36; col. 24, lines 39-42; figs. 1, 5a-5d);

generating, by one of the computer and the terminal, the debit information (col. 2, line 9; col. 4, lines 6-17; fig. 3c);

processing, by the intelligent storage device, the debit information (col. 2, lines 1-28 and 38-52; col. 3, lines 36-46; col. 22, lines 18-19; figs. 5a-5b);

before an interrupt-sensitive time period, transmitting a first data word of the at least one data word from the intelligent storage device to the terminal, the first data word being generated for the mutual dynamic authenticity test (col. 3, lines 10-45; col. 23, line 41 to col. 24, line 24; col. 28; figs. 4a and 5c-5d);

during the interrupt-sensitive time period, transmitting a particular signal from the terminal to the intelligent storage device, the particular signal including a posting triggering signal, a posting data record, an identifier generated using the first data word and a second data word of the at least one data word generated by one of the computer and the terminal (col. 22, lines 45-58; col. 24; figs. 5a-5d); *in other words, Chaum discloses time out creates interrupt*;

checking, by the intelligent storage device, the identifier (col. 15, lines 22-64; col. 21, lines 38-44;); *correspondingly, Chaum discloses identifier as a handshake, interrupt, and buffer*;

posting, by the intelligent storage device, the debit information as a function of the posting data record (col. 2, lines 1-22; col. 4, lines 1-18; col. 15, lines 22-64; col. 5, lines 55-63; col. 6, lines 47-51; figs. 5a-5d; col. 22, lines 18-19); *similarly, Chaum discloses the removable smart card as the posting data record;*

generating, by the intelligent storage device, a further identifier as a function of the second data word (col. 23, line 41 to col. 24, line 24; figs. 5c-5d);

transmitting, by the intelligent storage device, a confirmation signal and the further identifier to the computer via the terminal, the confirmation signal being provided to indicate that the debit information has been posted, the confirmation signal being transmitted from the terminal to the computer one of during and outside of the interrupt-sensitive time period (col. 26, lines 13-35; figs. 5c-5d). *In other words, Chaum discloses discontinuous intervals are during and outside of the interrupt-sensitive time period. He further discloses performing a mutual dynamic authenticity test between the computer, the terminal and the intelligent storage device using at least one data word.*

However, Chaum does not explicitly teach at least one data word constantly changing. On the other hand, Stallings discloses the at least one data word constantly changing in the form of a random number generator (page 153, second and third paragraph). He discloses value that is changeable by being a random number. Thus, it would have been obvious to one of ordinary skill in the art to use this limitation the at least one data word constantly changing for the advantage of establishing a very secure encryption system using random numbers generated by an internal clock in the microprocessor.

Art Unit: 3624

Re claim 9, Chaum teaches after the confirmation signal is transmitted, receiving an acknowledgment signal for the posted debit information from the computer by the terminal (col. 3, lines 10-45; col 4, lines 18-48).

Re claim 10, Chaum teaches mobile intelligent storage device includes an IC card (abstract).

Re claim 11, Chaum teaches wireless secure communication is performed via a computer station (fig. 1).

Re claim 12, Chaum teaches posting data record includes a transaction data record for creating a log book entry in the intelligent storage device (col. 1, lines 6-15; col. 2, lines 38-52; col. 2, line 65 to col. 3, line 9; col. 3, lines 10-45).

Re claim 13, Chaum teaches transaction data record is supplemented by an acknowledgment signal which is transmitted outside of the interrupt-sensitive time period (col., lines).

Re claim 14, Chaum teaches intelligent storage device is formed using a plurality of page records for storing the debit information, and the method further comprising the steps of: temporally storing the transaction data record during the interrupt-sensitive time period on a particular page record of the plurality of page records; and outside of the interrupt-sensitive time period, transmitting the transaction data record to a log book data file (col., lines; col. 2, lines 38-52; col. 3, lines 10-45; col. 3, line 54 to col. 4, line 18).

Art Unit: 3624

Re claim **15**, Chaum teaches until the transmitting of the transaction data record to the log book data file is performed, blocking the intelligent storage device for posting the debit information (col. 3, line 54 to col. 4, line 18).

Re claim **16**, Chaum teaches the method is utilized to post use fee debit information (col. 1, lines 6-15; col. 2, lines 38-52).

Re claim **17**, Chaum teaches the method is utilized to collect a toll for a motor vehicle (abstract).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Thao Havan whose telephone number is (571) 272-8111. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (571) 272-6747. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct-uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

TTH
4/20/2005

VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

